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TITLE: Method for machining cantilever probe tip of scanning probe microscope

INVENTOR: HONG, Y A; KIM, H J ; KIM, J J ; KIM, W ; LEE, T G

PATENT-ASSIGNEE: HYNIX SEMICONDUCTOR INC[HYNIN]

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ABSTRACTED-PUB-NO: KR2001065673A

BASIC-ABSTRACT:

NOVELTY - A method for machining a cantilever probe tip of a scanning probe microscope is provided to machine the cantilever probe tip like a needle by using a focused ion beam equipment but not using any additional software for obtaining a high aspect ratio, thereby analyzing a deep trench or a lower part of a contact hole as well as a plane surface.

DETAILED DESCRIPTION - A method for machining a cantilever probe tip of a scanning probe microscope includes the steps of coating metal ions by a

predetermined thickness on a cantilever probe tip, mounting the cantilever probe tip(10) on a focused ion beam equipment and tilting the cantilever probe tip by an end angle to obtain for setting a fine machining area(20), removing the fine machining area set by the focused ion beam and rotating the tip by a predetermined angle with respect to a shaft Z perpendicular to a plane surface, setting a new fine machining area, and repeating the third and fourth steps until the tip rotates by 360deg;.

CHOSEN-DRAWING: Dwg.1/10

TITLE-TERMS: METHOD MACHINING CANTILEVER PROBE TIP SCAN PROBE  
MICROSCOPE

DERWENT-CLASS: S03

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